

# INSTALLATION INSTRUCTION SUPPLEMENT

## FSD Series

### Field Supplied Sleeves on Fire Smoke Dampers

Refer to:  
 'Installation Instructions for FSD-XXX, DFD-XXX, CFSD-XXX, & SSFSD-XXX, Series Fire & Combination Fire Smoke Dampers'  
 (Part #461336)

**"UL CLASSIFIED**  
**(see complete marking on product)"**  
**"UL CLASSIFIED to Canadian safety standards**  
**(see complete marking on product)"**  
 Standards UL 555 & UL 555S  
 Classifications Filed at UL under Listing #R13317

### 1. GAUGES AND LENGTHS OF FIRE DAMPER SLEEVES

All fire smoke dampers must be installed in a steel sleeve of the required gauge and length. See Table 1 for required minimum sleeve gauges. Maximum sleeve thickness is 10 gauge (3.5mm). Sleeve inside dimensions must equal damper outside dimensions.

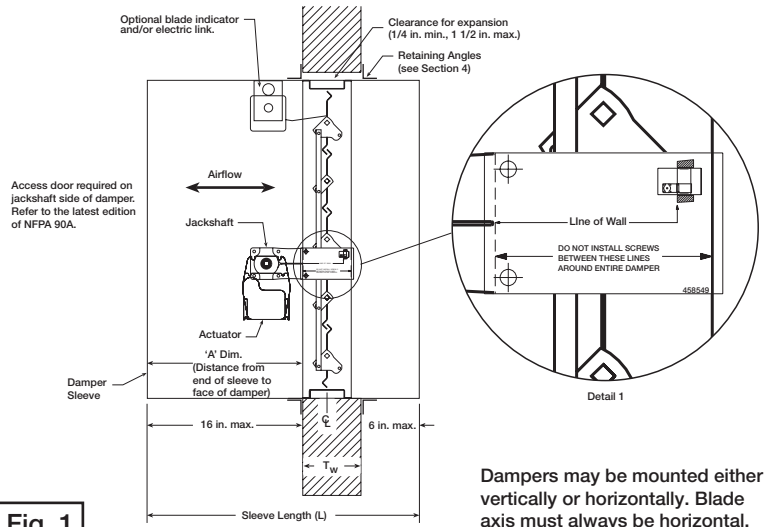
Sleeves shall extend a maximum of 16 in. (406mm) beyond the wall or floor on the actuator side of the damper (see Figure 1). When an access door is incorporated as a part of the sleeve on the side opposite the actuator, the sleeve shall also extend a maximum of 16 in. (406mm) beyond the wall or floor. When there is no access door incorporated as part of the sleeve, the sleeve shall extend a maximum of 6 in. (152mm) beyond the wall or floor on the side of the damper opposite the actuator.

### 2. ATTACHING FIRE DAMPERS TO SLEEVES

All four sides of the damper frame must be attached to the sleeve with one row of attachments on each side of the frame. Attachments must be spaced a maximum of 6 in. (152mm) on centers and a maximum of 2 in. (51mm) from corners. A minimum of 4 attachments (2 on each side of the frame) are required. One of the methods of attachment shown below must be used.

- tack or spot welds
- #10 sheet metal screws
- 1/4 in. (6mm) bolts and nuts
- 3/16 in. (4.7mm) steel pop rivets

Fig. 1



Dampers may be mounted either vertically or horizontally. Blade axis must always be horizontal.

Minimum Sleeve Thickness for Fire Dampers			
Type of Duct to Sleeve Connection	Duct	Duct Dimension in. (mm)	Sleeve Gauge
Rigid	Round	24 in. (610mm) max. diameter	16 (.060 in.) [1.5mm]
	Rectangular	36 in. (914mm) max. width or 24 in. (610mm) max. height	
Rigid	Round	over 24 in. (610mm) diameter	14 (.075 in.) [2mm]
	Rectangular	over 36 in. (914mm) width or over 24 in. (610mm) height	
Breakaway (or no duct)	Round or Rectangular	12 in. (305mm) wide and under	26 (.018 in.) [.46mm]
		13 in. - 30 in. (330mm - 762mm) wide	24 (.024 in.) [.6mm]
		31 in. - 54 in. (787mm - 1371mm) wide	22 (.030 in.) [.76mm]
		55 in. - 84 in. (1397mm - 2134mm) wide	20 (.036 in.) [.9mm]
		85 in. (2159mm) wide and over	18 (.048 in.) [1.2mm]

**Important Note:** Sleeve thickness must not be less than the gauge of the connecting duct.  
 UL Standard 555 requires all ducts to terminate at the fire damper sleeves or the damper frames.

Table 1: Minimum sleeve thickness for fire dampers.